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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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20792	7590	01/25/2005	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627			WONG, BLANCHE	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/754,490	REFAI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Blanche Wong	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,4-10,36 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Czaja et al. (U.S. Pat No. 6,567,666).

With regard to claims 1 and 36, Czaja discloses forward links (col. 2, ln. 30) (communicating between the wireless terminal and a first node) and messaging structure (radio configuration) for reporting to the base stations (node) (col. 2, ln. 3-33). Czaja introduces a system configuration parameter (radio configuration) (col. 2, ln. 39) and messages are updated to include information concerning both systems' base station (identifying a second radio configuration available for a second node that supports a second set of radio configuration that is different from the first set of radio configuration) (col. 2, ln. 43-44). Czaja also explicitly shows a soft handoff (col. 2, ln. 29) or "Make-Before-Break" (col. 1, ln. 65) (simultaneously communicating), and a true handoff that combines signals (simultaneously communicating) from both generation systems before dropping (col. 2, ln. 55-56).

With regard to claim 4, Czaja further discloses General Handoff Direction Message, Extended Handoff Direction Message, The Neighbor List Message, Extended Neighbor List Message (transmitting information) (col. 2, ln. 40-42); and operating with the same channel bandwidth (using a common channel coding) (col. 3, ln. 41-43) (see also Fig. 6).

With regard to claim 5, Czaja further discloses handoff between inter-generation systems (transmitted from respective ones of the first and second nodes) based on a selection based on the signal strength (a common process) (col. 2, ln. 44-46).

With regard to claim 6, Czaja further discloses the selection based on the signal strength of the received pilot signal (a composite signal) (col. 2, ln. 46) and a RAKE receiver (a RAKE process) (col. 3, ln. 66).

With regard to claim 7, Czaja further discloses CDMA (col. 3, ln. 35-38).

With regard to claim 8, Czaja further discloses a part of the new 3G (IS-2000) (second) system operates within the same channel bandwidth as the old 2G (IS-95) (first) system (a second set of radio configurations that includes only a subset of first set of radio configuration).

With regard to claim 9, Czaja further discloses a part of the new 3G (IS-2000) (first) system operates within the same channel bandwidth as the old 2G (IS-95)

(second) system (a second set of radio configurations that includes only a subset of first set of radio configuration).

With regard to claim 10, Czaja further discloses a selection (identifying) based on the signal strength of the received pilot signal (a predetermined criterion) (col. 2, ln. 44-46).

3. Claims 14-19,24-35,40-43 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Illidge et al. (U.S. Pub. No. US2002/0085514).

With regard to claims 14 and 40, Illidge discloses whether the target cell can support IS-2000 traffic channels (whether a common radio configuration is available) (para.[0027], ln. 12, and para. [0028], ln. 2). Illidge explicitly shows a soft handoff (handing off) (para. [0027], ln. 2) and in either case, switching the call to an IS-95 traffic channel (based on the determination of whether a common radio configuration is available) (para.[0028], ln. 8-9).

With regard to claims 15 and 41, Illidge further discloses an IS-2000 that might not support (non-compliant as defined in Specification, p. 4, ln. 1-2) with IS-95 (para. 0028], ln. 2-3).

With regard to claims 16 and 42, Illidge further discloses an IS-2000 that might not support (non-compliant) with IS-95 (para. 0028], ln. 2-3).

With regard to claim 17, Illidge further discloses a soft handoff (para. [0027], ln. 2) using IS-95 traffic channel (common channel configuration) (para.[0028], ln. 8-9).

With regard to claim 18, it is inherent in a soft handoff after a common channel configuration is identified to change the radio configuration used for communications to the common radio configuration, and then to communicate according to the common radio configuration, as recited in claim 18:

With regard to claim 19, it is inherent in a soft handoff to transmit information using the common radio configuration (a common channel coding), as recited in claim 19.

With regard to claims 24 and 32, Illidge discloses a IS-95 (a first node) and IS-2000 switching the call to an IS-95 (a radio configuration control circuit operative to identify a common radio configuration of the first set of radio configuration that is also a member of a second set of radio configurations supported by a second node and to responsively cause the first and second nodes to simultaneously communicate with the wireless terminal according to the identified common radio configuration).

With regard to claim 25, Illidge further discloses an IS-2000 that might not support (non-compliant as defined in Specification, p. 4, ln. 1-2) with IS-95 (para. 0028], ln. 2-3).

With regard to claim 26, Illidge further discloses an IS-2000 that might not support (non-compliant) with IS-95 (para. 0028], ln. 2-3).

With regard to claim 27, Illidge further discloses switching (commanding) the call to an IS-95 traffic channel (identified second radio configuration) when target cells does not support IS-2000 or no IS-2000 traffic channel is available (para. [0027], ln. 11-19, and para. [0028], ln. 1-9).

With regard to claims 28 and 33, Illidge discloses requesting (a request) an IS-2000 (second) traffic channel (radio configuration) from the target cell (wireless terminal) (para. [0028], ln. 4), and switching (change its communications ... to conform to the common radio configuration) the call to an IS-95 traffic channel (the common radio configuration) when target cells does not support IS-2000 or no IS-2000 traffic channel is available (para. [0027], ln. 11-19, and para. [0028], ln. 1-9).

With regard to claims 29 and 35, Illidge discloses a set of CDMA radio configuration (para. [0010], ln. 2).

With regard to claim 30, Illidge discloses a BTS (base station) (para. [0027], ln. 7).

With regard to claim 31, Illidge discloses a BCS (mobile switching center) (para. [0027], ln. 8).

With regard to claim 34, Illidge further discloses a soft handoff (simultaneously communicate) (para. [0027], ln. 2).

With regard to claim 43, Illidge further discloses whether the target cell can support IS-2000 traffic channels (whether a common radio configuration is available) (para.[0027], ln. 12, and para. [0028], ln. 2). Illidge explicitly shows a soft handoff (means for handing off; means for performing a soft handoff) (para. [0027], ln. 2) and in either case, switching the call to an IS-95 traffic channel (based on the determination of whether a common radio configuration is available; the common radio configuration) (para.[0028], ln. 8-9).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2,3,11-13,37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czaja in view of Illidge.

With regard to claims 2 and 37, Czaja discloses a method according to claim 1. However, Czaja fails to explicitly show a radio configuration compliant with a wireless communications standard and a radio configuration non-compliant (Specification, p. 4, ln. 1-2) with a wireless communications standard.



In an analogous art, Illidge discloses an IS-2000 that might not support (non-compliant) with IS-95 (para. 0028], ln. 2-3).

A person of ordinary skill in the art would have been motivated to employs Illidge in Czaja in order to obtain a compliant and non-compliant radio configuration. The suggestion/motivation to do so would have been to provide for a network infrastructure that can continue to offer the user service outside the IS-2000 coverage area without requiring manual user intervention. Illidge, para. [0005], ln. 2-3. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Illidge and Czaja to obtain the invention as specified in claim 2.

With regard to claims 3 and 38, Czaja discloses a method according to claim 1. However, Czaja fails to explicitly show an IS-95 compliant with a wireless communications standard and an IS-2000 compliant radio configuration that is non-compliant (Specification, p. 4, ln. 1-2) with a wireless communications standard.

In an analogous art, Illidge discloses an IS-2000 that might not support (non-compliant) with IS-95 (para. 0028], ln. 2-3).

A person of ordinary skill in the art would have been motivated to employs Illidge in Czaja in order to obtain a compliant and non-compliant radio configuration. The suggestion/motivation to do so would have been to provide for a network infrastructure that can continue to offer the user service outside the IS-2000 coverage area without requiring manual user intervention. Illidge, para. [0005], ln. 2-3. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the

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art to which the invention pertains to combine Illidge and Czaja to obtain the invention as specified in claim 3.

With regard to claim 11, Czaja discloses a method according to claim 1. However, Czaja fails to explicitly show requesting communication according to the second radio configuration from the wireless terminal, as recited in claim 11.

In an analogous art, Illidge discloses requesting an IS-2000 (second) traffic channel (radio configuration) from the target cell (wireless terminal) (para. [0028], ln. 4).

A person of ordinary skill in the art would have been motivated to employ Illidge in Czaja in order to obtain a request for communication. The suggestion/motivation to do so would have been to provide for a network infrastructure that can continue to offer the user service outside the IS-2000 coverage area without requiring manual user intervention. Illidge, para. [0005], ln. 2-3. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Illidge and Czaja to obtain the invention as specified in claim 11.

With regard to claim 12, Czaja discloses a method according to claim 1. However, Czaja fails to explicitly show an identified second radio configuration.

In an analogous art, Illidge discloses switching (commanding) the call to an IS-95 traffic channel (identified second radio configuration) when target cells does not support IS-2000 or no IS-2000 traffic channel is available (para. [0027], ln. 11-19, and para. [0028], ln. 1-9).

A person of ordinary skill in the art would have been motivated to employs Illidge in Czaja in order to obtain a request for communication. The suggestion/motivation to do so would have been to provide for a network infrastructure that can continue to offer the user service outside the IS-2000 coverage area without requiring manual user intervention. Illidge, para. [0005], ln. 2-3. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Illidge and Czaja to obtain the invention as specified in claim 12.

With regard to claim 13, Czaja discloses a method according to claim 1. However, Czaja fails to explicitly show an identified second radio configuration.

In an analogous art, Illidge discloses switching the call to an IS-95 traffic channel (identified second radio configuration) when target cells does not support IS-2000 or no IS-2000 traffic channel is available (para. [0027], ln. 11-19, and para. [0028], ln. 1-9). It is obvious in a soft handoff that simultaneous communication is established before terminating communications between the wireless terminal and the first node while continuing communications between the wireless terminal and the second node, as recited in claim 13.

A person of ordinary skill in the art would have been motivated to employs Illidge in Czaja in order to obtain a request for communication. The suggestion/motivation to do so would have been to provide for a network infrastructure that can continue to offer the user service outside the IS-2000 coverage area without requiring manual user intervention. Illidge, para. [0005], ln. 2-3. At the time the invention was made,

therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Illidge and Czaja to obtain the invention as specified in claim 13.

With regard to claim 39, Czaja further discloses CDMA (col. 3, ln. 35-38).

6. Claims 20-23,44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Illidge in view of Czaja.

With regard to claim 20, Illidge discloses the method according to claim 19. However, Illidge fails to explicitly show a common process.

In an analogous art, Czaja discloses a handoff between inter-generation systems (transmitted by respective ones of the first and second base stations) based on a selection based on the signal strength (a common process) (col. 2, ln. 44-46).

A person of ordinary skill in the art would have been motivated to employ Czaja in Illidge in order to obtain a common process. The suggestion/motivation to do so would have been to provide for soft handoffs on forward links between two different generations of CDMA systems. Czaja, col. 2, ln. 29-30. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Czaja and Illidge to obtain the invention as specified in claim 20.

With regard to claim 21, Illidge discloses the method according to claim 20. However, Illidge fails to explicitly show receiving a composite signal and a RAKE process.

In an analogous art, Czaja discloses the selection based on the signal strength of the received pilot signal (a composite signal) (col. 2, ln. 46) and a RAKE receiver (a RAKE process) (col. 3, ln. 66), as recited in claim 21.

A person of ordinary skill in the art would have been motivated to employ Czaja in Illidge in order to obtain a common process. The suggestion/motivation to do so would have been to provide for soft handoffs on forward links between two different generations of CDMA systems. Czaja, col. 2, ln. 29-30. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Czaja and Illidge to obtain the invention as specified in claim 21.

With regard to claim 22, Illidge discloses the method according to claim 14. However, Illidge fails to explicitly show performing a hard handoff if a common radio configuration is not available.

In an analogous art, Czaja discloses hard handoff (col. 2, ln. 6). It would be obvious that if any type of soft handoff is not available, a hard handoff is necessary. (See also col. 2, ln. 6-24)

A person of ordinary skill in the art would have been motivated to employ Czaja in Illidge in order to obtain both hard and soft handoffs. The suggestion/motivation to do so would have been to provide for the reporting of the generation type of the base

station. Czaja, col. 2, ln. 32-33. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Czaja and Illidge to obtain the invention as specified in claim 22.

With regard to claim 23, Illidge discloses the method according to claim 14. However, Illidge fails to explicitly show CDMA.

In an analogous art, Czaja discloses CDMA (col. 3, ln. 35-38).

A person of ordinary skill in the art would have been motivated to employs Czaja in Illidge in order to obtain CDMA. The suggestion/motivation to do so would have been to provide for soft handoffs on forward links between two different generations of CDMA systems. Czaja, col. 2, ln. 29-30. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Czaja and Illidge to obtain the invention as specified in claim 23.

With regard to claim 44, Illidge discloses the method according to claim 40. However, Illidge fails to explicitly show performing a hard handoff if a common radio configuration is not available.

In an analogous art, Czaja discloses hard handoff (col. 2, ln. 6). It would be obvious that if any type of soft handoff is not available, a hard handoff is necessary. (See also col. 2, ln. 6-24)

A person of ordinary skill in the art would have been motivated to employs Czaja in Illidge in order to obtain both hard and soft handoffs. The suggestion/motivation to do so would have been to provide for the reporting of the generation type of the base

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station. Czaja, col. 2, ln. 32-33. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Czaja and Illidge to obtain the invention as specified in claim 44.

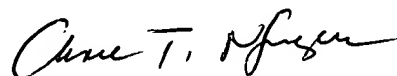
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*BW*

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January 24, 2005



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600